

REMARKS

Claims 1-9, 11, 12, 16, 17, 23, 25-31 and 38 are currently active.

Antecedent support for the amendments to the claims in regard to the limitation of the average curvilinear velocity is found in figure 1.

The Examiner has rejected the claims under 35 U.S.C. 112. The Examiner challenges the newly recited limitations to the claims introduced last amendment. Applicant respectfully disagrees with the conclusions of the Examiner presented. However, instead, applicant has removed the limitations added in the last amendment and instead introduced the limitation based on curvilinear velocity, as supported by figure 1.

Applicant's intention was to distinguish the claimed invention of the prior art cited by the Examiner previously. This prior art dealt with the motion of sperm or microorganisms. It was pointed out that sperm moves at a rate of 25 $\mu\text{m}/\text{sec}$. in comparison to lymphocytes that move at the average at speeds of 2 to 10 $\mu\text{m}/\text{min}$. (The comparison is made more clear if the sperm rate of 25 $\mu\text{m}/\text{sec}$. is converted to 1500 $\mu\text{m}/\text{min}$., which is more than two orders of magnitude faster than lymphocyte's at 2 to 10 $\mu\text{m}/\text{min}$.)

"Curvilinear velocity", which is a scalar average in the data in the above-identified patent application may be a better parameter to specify in relation to lymphocyte speed, rather than "straight line velocity" as found in figure 3 where applicant is showing suppression of non-biological motion. Figure 1 references the curvilinear parameter, where it is shown that the average curvilinear velocity of T-cells was increased with addition of interleukin-2 (IL-2). The bottom line is that all the data in the figures in the specification of the above-identified patent application supports the fact that applicant is only interested in cells that move very slowly under their own power verses the types of cells that have been cited in the applied art record. In fact, the type of cells that are cited by the Examiner in the applied art record are able to move fast enough, and are strong enough, under their own power that the forces that the applicant is concerned about in regard to the cells they study are essentially irrelevant to the cell cited by the Examiner in the applied art record.

In view of the foregoing amendments and remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 1-9, 11, 12, 16, 17, 23, 25-31 and 38, now in this application be allowed.

Respectfully submitted,

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